

FACT SHEET #12:

Effective Watering

Watering is a very effective dust suppressant. When applied regularly, water provides temporary stabilization to disturbed surface areas and reduces fugitive dust caused by earthmoving and driving on nonstabilized surface areas. Water also aids in compaction.

Maricopa County Earthmoving Permits require that fugitive dust generated from all earthmoving activities be controlled. Watering is one way to control fugitive dust (see your Dust Control Plan).

How much watering is enough?

- Roads and disturbed surfaces visibly appear moist with minimal silt.
- Soil has a crusted surface and is not easily crumbled between your fingers.
- Soil moisture content is optimum for compaction.
- Visible emissions are less than 20 percent opacity.

SOME TECHNIQUES THAT MAY WORK

Prior to Any Activity on Site:

• Wet the area to depth of cuts or equipment penetration.

For Active Operations:

- Apply water 15-30 minutes before starting operations.
- Apply water at the end of the day (e.g. soak overnight the next day's work area).
- During grading, water using a water truck.

- During trenching, water using a fine spray or mist.
- During screening, mist material after it drops from the screen.

After Clearing an Area:

- Apply water in sufficient frequency to prevent visible emissions (at least every 2 hours).
- Automatic sprinkler/spray bar systems are optimal in these areas.

For Unpaved Haul Roads/Access Roads/ Equipment Paths:

- Apply water in sufficient quantity to maintain a moist surface.
- Don't over water—muddy conditions increase trackout.

Water Penetration

• Surfactants or palliatives added to water increase penetration.

If the area is inaccessible to water trucks due to slope conditions or other safety factors, watering should be conducted with water hoses or sprinkler systems. Remember: many cities have restrictions for construction on sloped areas—be sure you comply with those as well.